

Appl. No. 10/065,684  
Reply to Office Action Dated April 9, 2007

### REMARKS

Applicants request reconsideration of the application in view of the above amendments and the following remarks. Claims 1, 2, 14 and 15 have been amended. It is believed that no new matter has been added by way of any amendments provided herein.

#### *Claim rejection under 35 USC § 101*

Applicant has amended independent claims 1, 14 and 15 to now be directed to statutory subject matter. Specifically, claims 1 and 14 are now directed to a process for refining a model which depends on relative permeability values. Specifically, the claims are directed at an iterative process for refining a model of a reservoir, wherein at step e) if the condition is met, the model is considered reliable and the relevant permeability value is determined as being accurate. This is described for example by the paragraph spanning pages 15 and 16 as originally filed.

Thus, the relative permeability value(s) used by the iterative model are refined through repeated iterations until the comparison of step d) coincides, whereupon the model is considered to be accurate and the relative permeability values are the final values that are output.

Claim 15 has been amended in line with the examiner's suggestion that the process is computer-implemented.

#### *Claim rejection under 35 USC § 112*

Applicant has amended the preamble of claims 1, 14 and 15 to clarify the invention. Specifically, the claims are concerned with an iterative model, which can be refined until the

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model is determined to be reliable and the relevant permeability parameter used to update the model, are accurate and finalized.

Applicant has also deleted the language 'substantially' and 'sufficiently' to overcome the examiner's objections, but has retained the term 'relative permeability' since this term is used consistently throughout the description to describe a parameter of the model.

Applicant has also amended step e) to overcome the examiner's rejection of ambiguity in that step e) now clearly recites "it is determined from the comparing step d)" as to what subsequent action is performed.

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### CONCLUSION

Applicant is of the opinion that this reply is fully responsive to all outstanding issues. Accordingly, the application is now deemed to be in condition for allowance, and notice to that effect is solicited.

This paper is submitted in response to the Office Action mailed 9 April 2007 for which the three-month date for response was 9 July 2007. Pursuant to 37 C.F.R. § 1.136(a), Applicants petition for an extension of time of two months in which to respond to the Office Action. This two month extension will bring the deadline for response to 9 September 2007, which is within the six-month statutory period.

Please apply any charges not covered, or any credits, to Deposit Account 50-2183 (Reference Number 21.0910).

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Respectfully submitted,

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